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10/820,589

04/08/2004

Kohei Yamada

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06/14/2007

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EXAMINER

SELLS, JAMES D

ART UNIT

PAPER NUMBER

1734

MAIL DATE

DELIVERY MODE

06/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/820,589

Applicant(s)

YAMADA, KOHEI

Examiner

James Sells

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 5-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 5-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bohm et al (US Patent 5,230,940) in view of Sorrells (US Patent 4,112,161) in further view of Herd (US Patent 3,706,250).

Bohm discloses a process and system for forming textile materials. As shown in the figures, latex layer 3, barrier layer 4 and backcoating 5 are applied to one side of layer 1 and tufts 2 are applied to the other to form a noise absorbing carpet. Various materials may be employed in the latex, barrier and backcoating layers (see col. 2, line 3 through col. 4, line 58 and examples 1-2).

However, Bohm does not disclose perforating the backing later in the manner claimed by the applicant. Regarding this difference, the applicant is directed to the reference of Sorrells.

Sorrells discloses a method of making a pile fabric. As shown in Fig. 2, this method involves employing tufting machine 24 with bar 26 and needles 28, which form perforations 22 through backing material 16. At col. 5, line 66 through col. 6, line 11, Sorrells discloses that instead of a tufting machine, a roll with a plurality of spikes may be used to form the perforations. At col. 6, lines 12-33, Sorrells discloses heating a hot

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melt adhesive, applying it to the primary or secondary backing and pressing the materials until the adhesive has set. Thus, Sorrells discloses heat bonding in the manner claimed by the applicant. In addition, since the perforating, heat bonding and spiking disclosed by Sorrells are performed in a continuous manner on indefinite length materials, it is the examiner position that are performed concurrent with each other in the manner claimed by the applicant.

At col. 2, line 65 through col. 3, line 4, Sorrells discloses that the perforations in the backing material provide a softer, more breathable textile fabric material. For this reason, it would have been obvious to one having ordinary skill in the art to perforate the backing layer, as taught by Sorrells, in the process of Bohm.

However, Sorrells does not disclose the backing roll having spike depressions as claimed by the applicant. Regarding this difference, the applicant is directed to the reference of Herd.

Herd discloses a perforating mechanism. As shown in Figs. 1, 3 and 5, the mechanism comprises roller or backing roll 1 with a plurality of holes or depressions 2a and perforation rolls comprising axles 5 and 20 and discs 18 and 19 carrying perforating pins 14, 15 and 16.

It would have been obvious to one having ordinary skill in the art to employ a backing roll having spike depressions, as taught by Herd, for the perforating system in the method of Sorrells combined with Bohm as described above in order to facilitate manufacture of the materials.

3. Claims 6-8 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bohm et al in view of Sorrells and Herd as described above in paragraph 2 in further view of Usui (US Patent 4,511,424).

Usui discloses a system for producing indefinite length web materials. As shown in Fig. 1, the system comprises material feeder 3, film feeder 4, and resin feeder 5, which supply materials, which are bonded together and collected on take-up winder 7. It is the examiner's position that feeder or feeder roll systems are well known and conventional in the art as shown by Usui. Therefore, it would have been obvious to one having ordinary skill in the art to employ such feeder or feeder roll system in the method and system of Bohm in view of Sorrells based on the physical requirements of the articles being manufactured.

Further, a limitation of the claimed combination which presented no novel or unexpected result over a similar feature used in the prior art reference, and solved no stated problem, was held to be an obvious matter of design choice within the skill of the art (*In re Kuhle*, 526 F2d 523, 188 USPQ 7 (CCPA 1975)). Therefore it is the examiner's position that the specific configuration of the feeders, feeder rolls and spiked rolls is within the purview of one having ordinary skill in the art as a matter of design choice based on the configuration of the articles being manufactured.

4. Claims 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bohm et al in view of Sorrells, Herd and Usui as described above in paragraph 3 in further view of Beggs et al (US Patent 4,384,020).

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Beggs discloses a noise attenuating structure. As shown in Fig. 1, the structure 8 comprises facing sheets 14 and 16 and a honeycomb core 10 with a plurality of open cells 12 therein. It would have been obvious to one having ordinary skill in the art to employ a honeycomb or open cell structure, as taught by Beggs, in the system of Bohm in view of Sorrells, Herd and Usui described above in order to provide improved noise attenuation as desired.

Response to Arguments

5. Applicant's arguments with respect to claims 1 and 5-13 have been considered but are moot in view of the new ground(s) of rejection.

Telephone/Fax

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Sells whose telephone number is (571) 272-1237. The examiner can normally be reached on Monday-Friday between 9:30 AM and 6:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached at (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


JAMES SELLS
PRIMARY EXAMINER
TECH. CENTER 1700